



COLUMBI



SALMON

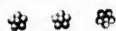


ILLUSTRAT
WITH PHOTO
VIEWS

J. H. B

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COLUMBIA RIVER



MON FISHING



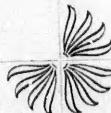
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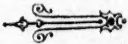
H. BRATT,

ASTORIA, OREGON.



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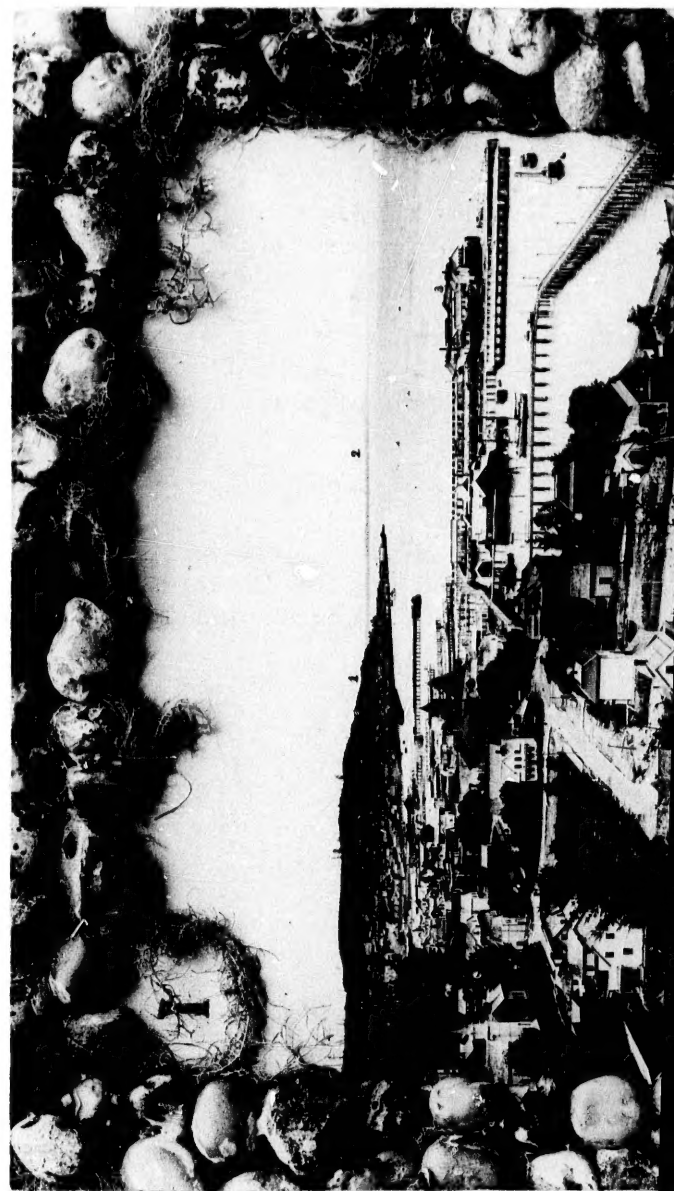
PREFACE

THE attractiveness of exhibits is in some degree as well as to the interest which they are capable of affording, as the case may be, of the articles exhibited at the World's Fair in Chicago was a notable instance of more wide-spread attention than any other of the animal, vegetable or mineral kingdoms. The value of the collection is more productive of interest when placed in terms of the progress of the age in the industrial, mechanical and scientific thought, is easily explainable: In addition to the views of the finny tribe, the great salmon fishing industry in a unique manner, a series of photographs of the salmon canning process, an unending source of admiration and instruction. These views bound in album form have been so popular that they have yielded to a demand which has become almost insatiable. In presenting this work to those unfamiliar with the salmon fishing industry, it gives a sight into the various methods of catching the salmon, the industry digenous to the waters of the great river of the Pacific, the practical operation of the cannery from the time the salmon reaches the market. Numerous articles on the subject of salmon canning, authorities, but the author's modest little volume is intended to be binding, with a thorough yet conservative description of the attractive and convincing proofs of its absolute value. The photographic views with which the work is illustrated, showing the daily routine of work throughout the industry, to avoid both exaggeration and the advertising character of the work interested in salmon canning. With this explanation, it is hoped to prove, in some small degree, both interesting and valuable.

PREFACE.

exhibits is in some measure proportionate to their rarity, which they are capable of inspiring by reason of the beauty or of the articles exhibited. Oregon's Fisheries display at the is a notable instance of this fact, for it attracted probably than any other of the almost innumerable collections from several kingdoms. That an exhibit of fish should prove so produced in terms of competition with the highest achievements mechanical and decorative arts, however anomalous at first le: In addition to a large and varied assortment of members salmon fishing industry of the Columbia River was explained ries of photographic views, the work of the writer, proving iration and instruction. Since that time (1893), the calls for form have been so numerous that the author has concluded to become almost imperative, and publish the series, together with In presenting this volume it is the author's intention to give e salmon fishing industry on the lower Columbia, a slight in- ods of catching the Chinook and other varieties of salmon in- ne great river of the west, together with an explanation of the annery from the arrival of the salmon until it is ready for the cles on the subject have been written heretofore by competent s modest little volume will stand alone as the only work com- et conservative description of Columbia river salmon fishing, ng proofs of its absolute correctness contained in the series of hich the work is illustrated. All of these views were taken dur- rk throughout the fishing season, and due care has been taken and the advertising of the business of any of those directly in- g. With this explanation the author trusts his efforts will ee, both interesting and instructive.

J. H. BRATT.





J. H. BRATT,

PHOTO

.. BY ..

Astoria, Or.

Ask for Bratt's Descriptive Photo Album of Columbia River Fishing Scenes.

Astoria Fro

ASTORIA'S commanding location as the Pacific Northwest is too generally recognized to need increase of her commercial relations with the world, or more especially since the completion of the Columbia River, a fact more eloquently than pen can describe of commerce, and pointing with prophetic force, not be amiss, however, to emphasize the factor on the Pacific coast north of San Francisco, by the latter, among which may be considered the most beneficial to shipping after an extended voyage of eight miles, a body of water eight miles in width, one of the great rivers of the world—a river which with its tributaries covers per cent of the entire United States)—Astoria, on the North Pacific Coast must be admitted to possess advantages bestowed by nature with such a surmountable between her and the goal of the Pacific, forward with confidence to an early realization of her place in the commercial marts of the world for the excellence of the Royal Chinook Salmon, and other salmon of the world and caught only at Astoria, the canning industry has been extensively carried on, and, of course, the chief business of the city, producing an annual revenue of over \$1,000,000, and the highest price in both home and foreign markets.

- I Smith's Point.
- II Tanzy Point, Fort Stevens and Jetty in the Distance.
- III Canneries and Net Racks.

Astoria From the East.

I

ing location as the future maritime metropolis of the Pacific. Generally recognized to require any extended description, the international relations with other countries during the past ten years, the completion of the great jetty at the mouth of the river, testifies in a pen can describe to her paramount importance in the world with prophetic finger to a certain glorious future. It may emphasize the fact that Astoria has indisputably the finest harbor north of San Francisco. She has, too, advantages not possessed by any other port on the coast. The fresh water of the great Columbia, so near at hand, is an extended voyage. With a river frontage of almost six miles in width, a location at the gateway of one of the finest rivers in the world, which with its tributaries drains a territory comprising 25 per cent of the United States—Astoria's claims to future maritime supremacy on the coast must be admitted as reasonable and the logical outcome of her nature with such a lavish hand. With no obstacles not easily overcome, and the goal of her ambition, Astoria's 10,000 citizens look forward to an early realization of their brightest hopes. Astoria's name is known to the world first became famous because of the unrivaled Chinook Salmon, which is the acknowledged superior of all salmon in the world and caught only in the waters of the Columbia. The salmon trade has been extensively carried on here for over two decades, and constitutes the main business of the city, giving employment to nearly 4000 persons, and producing an annual revenue of over \$2,225,000. The Chinook salmon commands a high price in home and foreign markets, its superiority consisting in firmness

and Jetty in the Distance.

of flesh, a delicacy of flavor peculiarly its own, developed Chinook varies greatly in weight, 75 being taken, and the smallest being in the fish, however, weighs from 22 to 25 pounds, and year, according to the opinions advanced by various times branded young fish in such a manner when again captured, and by that means furnishes of the cherished theory that the Chinook salmon only returns to its native waters to spawn, and four years.

In addition to the Chinook, three other varieties of the Columbia river, viz: The Blue-back, the Steel-head, and the Coho, are scarcely equal to the Chinook, are superior to it, and command a price accordingly. A comprehensive view of the salmon industry of the Columbia, may be obtained from a list of sixteen canneries located in Astoria, which have been in operation at intervals for many miles up the river for the last eleven years (from 1884 to 1894 inclusive). The total catch of salmon in 1894 was 924,464 pounds or over half a million cases. It may be interesting to note, has a duration of four months, beginning August 10th, after which date and until the first of September is the season of salmon. Fall fishing (during the months of September and October), is carried on to some extent by a few canneries. The season from August 10th to April 10th is generally the best, the season usually being so light as to render profitable.

There are three devices for catching salmon. These are the gill-net, the trap and the seine. The gill-net is confined to such an extent as to render it almost useless, and is used with great financial success to the owners of the fish. Of the fishing

peculiarly its own, and its large proportion of oil. The fully
greatly in weight, 75 and 80 pound specimens occasionally
being in the neighborhood of ten pounds. The average
22 to 25 pounds, and is supposed to have attained its fourth
ons advanced by students of piscary, some of whom have at
ng fish in such a manner as to make them easily recognizable
by that means furnished circumstantial evidence in support
at the Chinook salmon, with comparatively few exceptions,
raters to spawn, and that maturity is reached in the space of

Chinook, three other varieties of salmon are taken in the Colum-
bia, the Steel-head and the Silver-side. These varieties, while
Chinook, are superior to all other salmon except the latter, and
greatly. A comprehensive idea of the magnitude and importance
of the Columbia, may be readily gathered from the fact that there
are many in Astoria, while several others dot the north or Washing-
ton many miles up the river. The output of these canneries for
the years 1884 to 1894 inclusive) reached the magnificent total of 265,
half a million cases yearly. The fishing season proper, it may
be said, is a duration of four months, beginning on April 10th and end-
ing on September 10th the law prohibits the taking
(during the months of September, October and part of Novem-
ber) to the extent by a few canners, but the practice of suspending opera-
tions on April 10th is generally followed, the run of fish during the fall
being so light as to render packing operations unprofitable.
The various devices for catching salmon in use on the Lower Columbia river,
the trap and the seine. On the upper river, where the stream is
so rapid as to render the fish-wheel practicable, the latter device is
of great success to the owner, and resulting in merciless and indiscrim-
inate. Of the fishing gear in use on the Columbia during the regu-

lar fishing season, it is estimated that there
These, together with the boats, have a value a
and represent probably one-third of the capital

Astoria From

THIS view shows where the proposed sea-wall
row neck of land known as Tongue Point a
From this point to the westerly end of the city
a distance of nearly six miles, the water varies
and is of sufficient area to accommodate the city

J. O. Hanthorn

J. O. Hanthorn's Cannery, located at the
familiarily known as Upper Astoria.

The location of the canneries with reference
determined by the channel, the course of which
ous in places and deflected by the rocky points
reason the subject of this illustration, as well
from shore, the intervening space between
a roadway and net racks. The latter is an
used in drying and repairing the nets. Du
standard, this cannery packs about a quarter
employment for 300 persons, including men
These include receiving, weighing, dressing,
ing, labeling and packing (in cases of 48 pounds
for shipment.

estimated that there are 1500 gill-nets, 20 seines and 300 traps. Boats, have a value approximately of over half a million dollars one-third of the capital invested in the industry.

Astoria From the West.

II

the proposed sea-wall will be begun on the East near the narrows as Tongue Point and so called from its tongue-like formation. At the westerly end of the city, at that portion known as Smith's point, the water varies in depth from 25 to 55 feet at low tide, and will accommodate the combined navies of the world.

O. Hanthorn's Cannery.

III

Cannery, located at the eastern end of the city, or in what is called the Narrows, Astoria.

The canneries with reference to their distances from terra firma, is situated on the coast, the course of which, like the shore-line, is somewhat tortuous, being bounded by the rocky promontory known as Tongue Point. For this reason, as will be seen, is built on piling some distance from the shore, the space between the cannery and the shore being utilized for the purpose of the piling. The latter is an indispensable adjunct of every cannery and is used for drying the nets. During a season in which the catch is up to the mark, the cannery packs about a quarter of a million pounds of fish, and furnishes employment for many persons, including men, boys and girls, in the different departments. The work consists of weighing, dressing, cleaning, cutting, canning, soldering, steaming (in cases of 48 pounds each), after which the salmon are ready for market.



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Descriptive P



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IV

The cannery in the foreground of the picture is the kind in operation on the lower river. It was built in 1905 and has a capacity of 57,500 cans of one pound each, which would require nearly 6,000,000 pounds of salmon to be obtained, to nearly 6,000,000 pounds for the season. The large canning establishments can obtain salmon so cheaply that they can reach the limit of their capacities from day to day, and so great as to compel packers to limit each of their catches. The price of salmon on the Columbia, i. e., the price paid for the fish, has steadily increased since the inception of the canning industry. One pound is the ruling rate. This is fixed by the National Fish and Game Commission, an organization established in 1886 and

In addition to the island (Desdemona) referred to above, there is another island in the Columbia sand bar can be seen in the Columbia between Astoria and Sand Island, and has a length of three miles. Its existence is also due to the action of the northward of this island almost all the trap fishing is done of the lower Columbia. The traps, to the westward of Scarborough Hill and eastward of

Elmore's Cannery.

IV

doing an extensive business in Astoria are prominently will, however, be sufficient for purposes of illustration. Scarborough Hill, the graceful slope of which is peren- verdant carpet, as if to relieve the otherwise monotonously [2] Desdemona Island, a sand formation between the north er a short distance below Astoria; [3] Cape Disappointment [4] Point Adams, the promontory on which stands Fort ntiful of the government reservations, and the government o the Columbia river.

ground of the picture is the most westerly establishment of lower river. It was established in 1876, and its daily capac- and each, which would amount, if the supply of fish could be pounds for the season. It is seldom, however, that any of ents can obtain sufficient raw material to enable them to cities from day to day, although at times the run of fish is to limit each of their boats to a given number. The price i. e., the price paid by the canner to the fisherman, has e inception of the canning industry, until now five cents per is is fixed by the Columbia River Fishermen's Protective blished in 1886 and having a present membership of 1800.

l (Desdemona) referred to above, another and larger tract of mbia between Astoria and the ocean. This is known as th of three miles, with a breadth of less than one-half mile. e action of the north and south channels. To the north- l the trap fishing is carried on, as well as much of the sein-

The traps, to the number of 300, are located in what is dot the water at close intervals over the large expanse ll and eastward of Fort Canby.

Drying and Mending

V

Gill-nets vary in length and depth according to the water in which he proposes to operate. Few are of proportion are 1800 feet, and have a depth of 100 feet, an important item of expense, and not infrequently fishermen abandon his net in order to save what is involved attendant upon fishing near the ocean being more successful taken. The more venturesome of the men sail all the way to the river; some sail boldly out to the ocean and wait the first of the flood tide, when salmon are usually taken in breakers at Sand Island and too often fall victims to the same.

The size of the gill-net mesh is determined by the size of the fish from 7 to 10 inches. During the early part of the season is generally used, but from June to August, when the fish are larger, possess a net of each class, use that having the largest mesh, cost from \$275 to \$300, and consists of from 100 to 200 pounds of rope (on which are attached the lead and floats to 200 pounds of lead and 450 to 550 floats. V floats are lines attached to top and bottom respectively. The twine is a new solution, and by this process the twine is made to be less readily seen by the salmon as they hear the floats renewed several times during a season, and provide a preserving effect on the twine. With the best of care after two years' use, being frequently broken and replaced in the freshet season. The work of repairing, which requires considerable time, and must be done with great care, and the smallest defect remedied.

ing and Mending the Nets.

V

and depth according to the means of the owner and the to operate. Few are less than 1400 feet long, while a large d have a depth of from 20 to 35 feet. A large gill-net is an , and not infrequently the hardy fisherman is compelled to save what is infinitely more precious—his life—the risks the ocean being many, without regard to what care may be some of the men allow their nets to drift across the entrance ly out to the ocean and endeavor to secure a haul before the salmon are usually plentiful; while still others approach the d too often fall victims of their own temerity.

mesh is determined by the caprice of the owner, and varies ng the early part of the season the small mesh net is most une to August, when the fish are uniformly large, those who use that having the larger mesh. The material in these nets nd consists of from 190 to 240 pounds of twine, 140 to 150 are attached the lead sinkers and corks or cedar floats), 160 to 450 to 550 floats. When a net is made and the cork and lead bottom respectively, it is immersed in a tank containing tan- process the twine is hardened and colored in such a way as to salmon as they head up stream. The tanning process is re- g a season, and proves a source of economy, because of the con-

With the best of care a gill-net becomes almost worthless g frequently broken by large fish and torn by snags during of repairing, which is performed on the net racks, requires st be done with great care, every portion being minutely exam- et remedied.

VI

Fishing With

VII

The subject of this photograph is a fish making another drift or starting for the cannery (most of the salmon fishing being done during the summer) by his good or ill luck on previous occasions, passing for or against certain portions of the river. The fish is allowed to drift four or five miles and the man in the attendant or boat-puller to row across the current with the boat and pays out the net, taking care to see that it does not come entangled. On the end first let out is attached a float, the other end is secured in the boat, and as soon as the net is the evenly distributed weight of the lead-line is thrown in position for its entire distance. From time to time the net is examined. By raising it slightly in places where fish have been captured, and if so, they are released. As light approaches the work is abandoned by the men and they go for rest after depositing their catch at either the cannery or hastily improvise canvas coverings for their sleeping quarters, comfortable sleeping quarters, where they are

Loading the Nets.

VI

the manner in which the net, after being repaired and dried, into the boat. The sides, or cork and lead lines, are placed the net being gathered in and passed over the roller to the greatest precision disposes of it in the stern of the boat in such a manner as to make the stowing of it a simple task.

Fishing With the Gillnet.

VII

A photograph is a fisherman hauling in his net preparatory to marketing for the cannery. In shaping his program for the night (being done during darkness), a fisherman is frequently guided by previous occasions, past experiences tending to prejudice him in his operations of the river. After being cast, the net is sometimes several miles and the modus operandi is as follows: Directing the boat across the current, the fisherman stands in the stern of the boat, taking care to see that the lead-line and cork line do not become entangled. The first let out is attached a small wooden buoy, while the boat, and as soon as the net has been cast the drift begins, the fisherman holds the lead-line holding the net in a perpendicular position. From time to time the boat is rowed along the cork-line and the net is slightly in places, the fishermen ascertain whether any fish are caught and if so, they are removed and the drift proceeds. As daylight approaches, the fishing is abandoned by most of the men, some going to their homes to prepare their catch at either the cannery or fish station, while others, who remain, coverings for their boats and convert them into moderately comfortable quarters, where they are rocked quietly to sleep after their morning





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Astoria, Or.

meal has been partaken of. Every boat is provided with a small stove, rendering a trip home for food unnecessary, should the weather be so cold. After reaching the station and resume their toilsome work after the catches of the business are uncertain, catches being made in some days while at other times barely sufficient are secured to

Coming in with

VIII

Residents of Astoria are treated daily during the fishing season, and one of whose beauties they never weary of sight, and on the fishing grounds, it is not unusual to see as many as 50 white sails glistening in the sun and forming a picture

Waiting for the

IX

The boats are here reproduced as they lie at anchor, after the catch has been unloaded at the fishing station. The boat sail, and is securely fastened in a manner to prevent the wind from blowing it away. The photograph was taken near Sand Island, a resting place for the men, and on the comparative quietude of these little floating homes may be seen.

Fishing Station

X

The photograph shows the Receiving Scow, where the seiners and trappers deliver their catches to those who have such stations convenient to the fishing grounds.

every boat is provided with stove and cooking utensils, unnecessary, should the men prefer to leave their fish at home to do some work after partaking of food and rest. The profits of the catches being made occasionally aggregating 3000 pounds, sufficient are secured to pay the repairs to the net.

Living in with the Catch.

VIII

are treated daily during the fishing season to a picturesque scene they never weary. Going to and returning from the fish-boat to see as many as 500 boats scudding briskly along, their sails up and forming a picture that delights the eye.

Waiting for the Tide.

IX

are moored as they lie at anchor waiting for the ebb tide after the fishing station. The awning is sometimes made out of sail cloth fastened in a manner peculiar to the Columbia river fishermen near Sand Island in Baker's Bay, which is a favorite place on the comparatively placid waters of which hundreds of boats may be seen.

Fishing Station.

X

is the Receiving Scow, or Fishing Station, where the gill-netters, deliver their catches to those of the canners who find it advisable to transport them to the fishing grounds. In addition to being a great





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accommodation to the fishermen, cannery find the reluctance of many of the former to return daily to plentifully. Where a scow is converted into a fish two rooms is built on deck. One of these rooms serves the other is used as a kitchen and for sleeping aparted and weighed when received, and the station is a plunger in which the fish are brought to the cannery.

Seining---Loading

XI

This method of taking salmon is generally a process of verses are sometimes met with. The seiners are met with the water is low, but an early summer following heavy during the winter previous, invariably causes a heavy injury to the seiner. The outfit of a seiner consists of a scow and a flat-bottomed boat, and his operations are portions of the beach or slightly submerged islands. The opportunity of hauling up the seine and removing the fish are about 1500 feet long, and vary in depth from 15 feet. They contain 650 pounds of twine, 200 pounds of rope upwards of \$1000. The photographs were taken at

Pushing O

XII

The launching of one of the flat-bottomed boats is a thing that is not accomplished without much difficulty. After being loaded (with the seine) the boat is launched

n, canners find the outlay profitable, because of the re-
to return daily to the city when salmon are running
converted into a fishing station, a small house containing
e of these rooms serves for a receptacle for the fish, while
nd for sleeping apartments. Salmon are classified, coun-
and the station is visited daily by a gasoline launch or
ought to the cannery.

g---Loading the Seine.

XI

on is generally a profitable one, although financial re-

The seiners are most fortunate during those years when
summer following heavy falls of snow in the mountains
variably causes a heavy freshet and consequent financial
of a seiner consists of ten men, four horses, seine, a large
and his operations are necessarily confined to favorable
submerged islands, which at low tide afford an oppor-
nd removing the fish. The seines used in the Columbia
in depth from 15 feet at the ends to 160 feet in the center.
ne, 200 pounds of rope and 150 pounds of lead, and cost
aphs were taken at Sand Island seining grounds.

Pushing Off.

XII

flat-bottomed boats used by the seiners, is an undertak-
hout much difficulty and expenditure of muscular force.
eine) the boat is left stranded until the tide is flooding,

when the crew await their opportunity and take advantage of them in getting it sufficiently far out to permit of the

Taking out the S

XIII

On starting out to make a haul, one end of the seine is hitched, while the boat's crew row out until the boat is rowed down stream and gradually shoreward until the seine forms a semi-circle. Another horse is then caught up the beach. As soon as there is room, a third horse No. 2, then No. 1 is taken off the end and follows No. 3 to the beach, which is but 200 feet wide, is reached. Meanwhile the seine has gradually been hauled down stream until the ends

Hauling In.

XIV

This photograph shows the hauling ashore of the seine formed as described in the foregoing.

The Haul.

XV

When the seine has been hauled in so that the lead is at the center, or widest portion still remains in the water and reaches shore in due course, and the fish taken out. These hauls are generally made between tides, and for a good catch be considered a good catch, from three to four hauls make

ity and take advantage of the receding waves to assist
it to permit of the use of the oars.

ing out the Seine.

XIII

ul, one end of the seine is left on shore, and to this a
rew row out until all the seine is in the water. Then
gradually shoreward until, when the beach is reached,
ther horse is then called into requisition, and is driven
room, a third horse is attached about fifty feet behind
d and follows No. 3, and so on until the head of the
s reached. Meanwhile the other end of the seine
eam until the ends meet, thus completing the circle.

Hauling In.

XIV

uling ashore of the seine after the circle has been

The Haul.

XV

d in so that the lead and cork lines are on the shore,
mains in the water in a bag-like formation. This also
the fish taken out, when the work is again begun.
een tides, and for one "outing" 1500 pounds would
ree to four hauls made each outing.



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XVI



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The Seiner's S

XVI

These scows are the abode of both man and horse in one of which, the men cook and sleep, the other usually kept near shore and rest on the sand at low tide

Trapping.

XVII

If a good location can be secured the fish trap is a device in use on the lower Columbia. The first cost are destroyed by the large quantities of drift that are season. Large trees, brought down by the force of a six miles per hour, occasionally lodge between the p and soon demolish the entire structure. This means and indirectly very much more. The trap consists heart, the tunnel and the pot. The lead is formed to 300 feet long, and along these, from the sand or high water mark, stretching netting which has been poses of preservation. At the end of the lead is the or trap web, in the shape of the organ from which it narrow end, the heart opens into the tunnel, which is and tapering toward the pot, a distance of ten feet. tunnel is almost two feet in diameter, the other end fish are secure, the action of the water on the small being such as to make escape almost, if not quite, impossible against the web with which the lead is constructed, following the lead, in a few moments are in the heart means of escape, they reach the opening known as the

ne Seiner's Scow.

XVI

both man and horse, and are divided into two parts, and sleep, the other serving as a stable. They are generally sand at low tide.

Trapping.

XVII

ired the fish trap is the most profitable salmon catching
bia. The first cost is considerable, and frequently traps
ties of drift that are carried toward the ocean in freshet
wn by the force of a current having a velocity of five or
odge between the piles on which the trap is suspended,
ructure. This means a direct loss of from \$600 to \$1000,

The trap consists of four parts, viz: The lead, the heart, the tunnel, and the netting. The lead is formed by driving a row of piles from 200 to 300 feet from the sand or bottom of the river to a point above the netting which has been previously coated with tar for purpose of the lead is the heart, also constructed of netting, from which it derives its name. At the lower or entrance of the tunnel, which is also formed of web without ends, is a space of ten feet. At its junction with the latter, the netting is wider, the other end being four feet, but once inside, the water on the small aperture through which they enter is most, if not quite, impossible. Salmon when they run into the lead is constructed, immediately head for deep water, and when they are in the heart. Swimming around this looking for a netting known as the tunnel, and through this they dash.

into the pot. The latter portion of the trap is forty feet from the bottom of netting, so that when the fish are removed they are out of the water. Altogether the trap is an ingenious device, an abundant source of revenue, if its location is good, and its property escape destruction from the causes referred to. Perhaps be better understood by referring to the plan of the trap. A. S. Tee, civil engineer, of Astoria.

Lifting the Trap

XVIII

The operation of removing the salmon from the trap is the raising of the pot out of the water. This done, the fish are easily reached. A single trap requires the attention of one man, and is usually paid from \$40 to \$50 per month each, but can, in some cases, be used for two traps.

Unloading the Boat

XIX

This shows the manner of unloading the boats, and the manner of transferring the catch to the cannery. Lines with hooks and baskets attached to the boats, and in a few minutes are sufficient to transfer the catch to the cannery. The fish are weighed and then left in charge of the cleaners.

Columbia River Fishing

XX

The boats used by the fishermen of the Columbia River are specially adapted to the service in which they are engaged, with a view to enable them to live through the stormy season of the lower Columbia, and are the outcome of continued experience. They are known universally as the Columbia River fishing boats.

f the trap is forty feet square, and unlike the heart, has a
he fish are removed it is only necessary to raise the pot
e trap is an ingenious device, and one that proves an
s location is good, and the owner fortunate in having
om the causes referred to above. Its construction will
referring to the plan over this photograph, drawn by Mr.
ia.

Lifting the Trap.

XVIII

ne salmon from the trap is simple, being performed by
e water. This done, the fish are as if in a huge dip-net
trap requires the attention of two men. These are usu-
nth each, but can, if necessary, attend to more than one

Loading the Fish.

XIX

hloading the boats, when the fish are brought direct to
nd baskets attached are let down to the boat and a few
the catch to the cannery, where they are immediately
of the cleaners.

A River Fishing Boat.

XX

men of the Columbia are of a design peculiar to them-
he service in which they are engaged. They are built
ive through the storms occasionally prevalent on the
ome of continued experiments for many years. They
umbia River fishing boat, are pointed at each end, 25



J. H. BRATT,

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Astoria, Or.

Descriptive Photo Album of Columbia River Fishing Scenes.

feet long, with a beam of from seven to eight feet, and cost \$250 each. When well handled taken by the men too often result in fatal accidents. river, fishermen, due almost entirely to accidents in exceptionally stormy seasons has been known to be engaged. Sudden squalls are of course responsible for a majority of the fatalities are generally due to carelessness or a combination of both. The more daring drifters too close in shore, perish in the attempt to breakers the chances in favor of rescue are exceedingly small. crews of Fort Canby and Point Adams comprise the main branches of the life-saving service on the Pacific coast. A helping hand can be outstretched to the unfortunate fisherman in temerity.

A Choice Specimen

XXI

The great size sometimes attained by the Chinook is evidenced by the accompanying photograph, which picture was taken for the purpose of showing the size of a Chinook of more than average weight.

Scow To

XXII

Many of the unmarried fishermen reside in the city in the necessity of paying house rent, while enjoying the advantage of being able to change its location at will, by taking their scows wherever fancy dictates. The owner of a scow or beach their homes near each other, and he

a seven to eight feet, have a carrying capacity of 6000
When well handled they are safe boats, but the great risks
result in fatal accidents. The mortality among Columbia
entirely to accidents or foolhardiness, is usually high, and in
has been known to reach almost $3\frac{1}{2}$ per cent of the men
of course responsible for the capsizing of many boats, but
generally due directly to either inexperience or foolhardi-
The more daring of the men favor the shoal water, and
perish in the attempt to recover their nets. Once in the
of rescue are exceedingly doubtful, and while the life-saving
at Adams comprise probably the best drilled and equipped
service on the Pacific Coast, lives are frequently lost before a
ched to the unfortunate ones who are victims of their own

A Choice Specimen.

XXI

attained by the Royal Chinook will be understood by ref-
photograph, which represents a 65-pound specimen. The
pose of showing the comparative dimensions of a genuine
e weight.

Scow Town.

XXII

shermen reside in these floating houses and thus avoid the
t, while enjoying the dual pleasure of owning a home and
ion at will, by taking advantage of the high tides and towing
dictates. The owners, if of like nationality, as a rule anchor
each other, and hence the name of Scow Town. The above

shows such a scene, and the original is to be seen in a more distinct view of one of these scows, made in a tasty manner, will be seen by reference to Illustration XXIV.

Chinook Salmon

XXIV

This represents a cannery scene with a quantity of Chinook to being cleaned, the beautiful specimen in the foreground measuring a length of 48 inches with a girth of 44 inches. It is a choice specimen of the king of food fishes, weighing about twenty pounds.

Steelhead Salmon

XXV

Steelhead Salmon, fifteen and twenty pounds. It is different from Chinook in color and flavor, but is not so rich in oil. The fact that the head and back are steel color. This is a variety of the Chinook, seldom weighing more than ten or fifteen pounds.

NOTES

Having critically examined and carefully read the contents of the book describing the Columbia River Salmon fishing industry, I find the same to be correct.

original is to be seen near the Scandinavian Cannery. A
of these scows, many of which are built in an exceedingly
y reference to Illustration No. 23.

Chinook Salmon.

XXIV

ry scene with a quantity of Royal Chinook Salmon previous
al specimen in the foreground weighing 74 pounds and hav-
h a girth of 44 inches. Illustration No. 25 shows another
of food fishes, weighing 72 pounds.

Steelheads.

XXVI

n and twenty pounds. This species is not unlike the Royal
but is not so rich in oil as the latter. It is so called from the
are steel color. The steelhead does not attain the great size
ighing more than forty pounds, and more frequently less

NOTE.

efully read the contents of this Descriptive Photographic Album, illustrating and
fishing industry, I find the statistics and statements contained therein authentic and
HOLLISTER D. McGUIRE,
Oregon State Game and Fish Protector.

